

WHAT IS CLAIMED IS:

1. A torque transmission system for transmitting a torque from a driving unit to a rotation unit, the system comprising:

a first rotating member rotated by receiving the torque by the driving unit;

a second rotating member that is connected to a rotating portion of the rotation unit, rotated along with the rotation portion, and disposed coaxially with the first rotating member; and

a first and second elastic members, each of which is elastically transformable and disposed as being sandwiched between a first protruding portion of the first rotating member and a second protruding portion of the second rotating member, wherein the first protruding portion protrudes towards the second rotating member while the second protruding portion protrudes towards the first rotating member with being displaced from the first protruding portion in a rotating direction,

wherein, when the first elastic member contacts both the first and second protruding portions, the second elastic member is disposed as being apart, with a gap, from at least one of the first and second protruding portions.

2. The torque transmission system according to Claim 1, wherein, when the first rotating member is rotated in a normal rotation direction relative to the second rotating member, the first elastic member contacts both the first and

second protruding portions.

3. The torque transmission system according to Claim 1, wherein it is designed that, when the first rotating member is rotated by a given rotation angle in a reverse rotation direction relative to the second rotating member, the second elastic member contacts both the first and second protruding portions.

4. The torque transmission system according to Claim 1, wherein a transmission torque is designed as being not more than 26 Nm when the first rotating member is rotated by a rotation angle of five degrees in a normal rotation direction relative to the second rotating member at room temperature.

5. The torque transmission system according to Claim 1, wherein a transmission torque is designed as being not more than 10 Nm when the first rotating member is rotated by a rotation angle of five degrees in a reverse rotation direction relative to the second rotating member at room temperature.

6. The torque transmission system according to Claim 1, further comprising:

a torque limiter that interrupts a torque transmitted from the first rotating member to the second rotating member when the transmitted torque exceeds a given value.